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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,351	07/30/2003	Andrew W. Gordon	8021-30	9298

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RUDEN, MCCLOSKEY, SMITH, SCHUSTER & RUSSELL, P.A.
222 LAKEVIEW AVE
SUITE 800
WEST PALM BEACH, FL 33401-6112

EXAMINER

MENON, KRISHNAN S

ART UNIT PAPER NUMBER

1723

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/630,351

Applicant(s)

GORDON ET AL.

Examiner

Krishnan S. Menon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 257-277 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 257-277 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 257 – 277 are pending as amended 2/3/06.

Terminal Disclaimer

The terminal disclaimer filed on 2/3/06 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on application 10/734,050 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 257-262, 269 and 270 are rejected under 35 U.S.C. 102(e) as being anticipated by Krylov (US 6,658,889)

Claims 257, 269, 270: Krylov teaches a reverse-osmosis desalination system aboard a fishing ship (see figures 1 and 9, and abstract) comprising sea water intake (7-figure 1), concentrate discharge system ((see WB in figure 1) which is coupled to a mixing system, which is an ice-slush maker with additional sea water (abstract) and the ice slush is disposed off after use. The system is capable of continuous operation.

Claim language, “configured” to perform a function (such as transport, dilute, discharge, or transfer) is functional language; the system of the reference is capable of such functions. The system of the reference includes a desalinated water transfer system (a tank and outlet control valves 3 and 9) which also capable of transfer of the of desalinated water to a land-based distribution system. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board’s finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990)

The “means for delivering desalinated water from the ... vessel to a land based distribution system” as recited in the claim does not become part of the claimed apparatus. It is also a means-plus-function limitation and invokes 35 USC 112, sixth paragraph, which therefore includes what is described in the specification and equivalents thereof. The specification describes various means including a pipeline to delivery by helicopter; and an equivalent means would include a hose connection or hand-carrying water in a bucket.

Claims 258-260: mixing tank – the slush-maker chamber is a mixing tank and includes inlet, outlet, series of baffles and mixing barrier and mixing device (the chiller conduits with scrapper: abstract)

Claim 261: high speed paddle mixer – see figures 5 A,B

Claim 262: device for mixing concentrate and seawater is a static mixer: see figure 1: the pipelines “WB” and direct seawater line join just before the entry port of chiller 2. This intersection is a static mixing point and therefore a static mixer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 257-262 and 264-277 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosley (US 6348148) in view of Krylov, or, alternately, Krylov in view of Bosley.

Bosley teaches an off-shore reverse osmosis desalination system with means for distribution of desalinated water to a land-based distribution system, and a method of desalinating water using the system as claimed – see abstract, figures and column 5 lines 15-48.

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Instant claims differ from the teaching of the Bosley reference in the recitation of the installation being on a sea-going vessel, mixing the concentrate with seawater before discharge, the seafloor embedded pipeline and the plant capacity.

Regarding the sea-going vessel and mixing the concentrate with seawater before discharge: Krylov teaches a desalination system on a fishing ship having the concentrate mixed with seawater as claimed – see paragraph 1 above for details. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of Krylov in the teaching of Bosley to have the installation on a moving vessel and to have desalinated water production as secondary to an application such as the slush making of the brine because the combination is very useful in making a stable slush as seen in figure 8 of Krylov (stable slush at higher salt concentration).

Regarding the embedded pipeline and plant capacity: Bosley teaches in figure 1, line 34, part of the line as running along the seafloor. It would be obvious to one of ordinary skill in the art at the time of invention that running the pipeline along the seafloor or embedded in the seafloor would only be equivalent, unless applicant can show that there is a patentable difference. An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982).

Regarding the capacity of the plant, it would be obvious to one of ordinary skill in the art at the time of invention that the plant could be designed to the desired capacity or fresh water demand. *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package “of appreciable size and weight requiring handling by a lift

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truck” where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentably distinguish over the prior art.); In re Rinehart, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) (“mere scaling up of a prior art process capable of being scaled up, if such were the case, would not establish patentability in a claim to an old process so scaled.” 531 F.2d at 1053, 189 USPQ at 148.). In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art.

Alternately, Krylov teaches a system as in paragraph 1 above, and a method of desalinating water using the system. Krylov differs from the claims in the recitation of the various ways of transferring desalinated water to shore, which is taught by Bosley as above. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of Bosley in the teaching of Krylov to have water delivered to the shore as needed from the fishing ship.

3. Claim 263 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bosley (US 6348148) in view of Krylov, or, alternately, Krylov in view of Bosley as in claim 257 above and further in view of Bailie (US 4,356,785).

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The teaching of Bosley in combination with Krylov differs from the claim in the second sea-going vessel for transfer of desalted water. Bailie teaches using a second vessel or barge for transferring purposes. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of Bailie in the teaching of Bosley in combination with Krylov because the second vessel can be used as a storage and delivery vessel as suggested by Bailie for the floating platform production unit of Bosley or the fishing ship of Krylov (see abstract, figure 1A and column 1 lines 45-60 of Bailie).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Krishnan Menon
Patent Examiner
2/23/06


JOHN KIM
Primary PATENT EXAMINER